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## **Technical Clarification for Disconnecting means on Wheelchair Lifts**

\*This clarification is to help identify where and what type of disconnecting means is allowed per code.

The 2002 National Electric Code Section VI *Disconnecting Means and Contol* rule 620-51 (C) (4) states: "On wheelchair lifts and stairway chair lifts, the disconnecting means shall be located within site of the motor controller."

Electrical working clearances must be maintained for the disconnecting means per code.

The NEC 2002 rule 620-51(A) allows for an exception regarding the type of disconnecting means for a wheelchair lift.

The exception states: Where an individual branch circuit supplies a wheelchair lift, the disconnecting means required by 620.51(C)(4) shall be permitted to comply with 430.109(C) This disconnecting means shall be listed and shall be capable of being locked in the open position.

Rule 430.109 (C) states: For stationary motors rated at 2 hp or less and 300 volts or less the disconnecting means shall be permitted to be one of the devices specified in (1), (2), or (3): (There are three types of switches that may be used under this exception.)

(1.) A general-use switch having an ampere rating not less than twice the full –load current rating of the motor. (This switch could be a simple lockable rotary switch. This type switch does not have to meet working clearances because it has no serviceable parts i.e. fuses or breakers.)

## Wheelchair lifts cont

- (2) On ac circuits, a general-use snap switch suitable only for use on ac (not general-use ac-dc snap switches) where the motor full-load current rating is not more than 80 percent of the ampere rating of the switch. (A snap switch is like a light switch; this switch also has to be lockable. This type switch does not have to meet working clearances because it has no serviceable parts.)
- (3) A listed manual motor controller having a horsepower rating not less than the rating of the motor and marked "Suitable as Motor Disconnect". (A lockable switch with a fusible or thermal link would fall into this category. This type of switch does require working clearances because the fusible links are replaceable.)

So where do I put the disconnect?

For wheelchair lifts that are not enclosed in hoistways the disconnect may be mounted inside of the enclosure if it meets exception 1 or 2 and uses a switch that does not require maintenance and working clearances. For disconnects that require maintenance, and thus working clearances, the switch may be located outside of the enclosure as long as it is within site of the motor controller.

For wheelchair lifts located in fully enclosed hoistways, if the hoistway is not large enough to provide working clearances, which are generally a minimum of 3 feet, you could provide a switch that meets type 1 or 2 as long as the switch does not have any serviceable parts.

<u>NOTE</u>: For wheelchair lifts inspected by L&I electrical inspectors a sticker indicating that the permitted electrical installation has been performed must be affixed to the disconnect prior to requesting an inspection by the elevator inspector.

For questions or comments contact Becky Ernstes at 360-902-6456.